

What is Claimed is:

1. An organic EL display device comprising:

first electrodes and second electrodes which a
5 voltage is applied to;

conductive color changing layers capable of being
electrically connected to the first electrodes; and

an organic luminescent medium placed between the
second electrodes and the color changing layers.

10 2. The organic EL display device of claim 1, wherein
the color changing layers are in contact with the organic
luminescent medium.

15 3. The organic EL display device of claim 1, further
comprising a carrier transport flattening layer between the
color changing layers and the organic luminescent medium.

20 4. The organic EL display device of claim 1, wherein
the first electrodes comprises a material constituting the
color changing layers.

25 5. The organic EL display device of claim 1, wherein
the first electrodes, the color changing layers, the organic
luminescent medium and the second electrodes are placed in
this order, and width of the color changing layers is
substantially same as width of the first electrodes.

30 6. The organic EL display device of claim 1, wherein
the first electrodes contact the color changing layers, and

the first electrodes are narrower than the color changing layers.

7. The organic EL display device of claim 6, wherein the first electrodes are placed between the color changing layers and the organic luminescent medium.

8. The organic EL display device of claim 6, wherein the first electrodes are placed inside the color changing layers.

9. The organic EL display device of claim 6, wherein the first electrodes are placed substantially on a plane where the color changing layers are arranged.

10. The organic EL display device of claim 1, further comprising shading layers between the color changing layers.

11. The organic EL display device of claim 1, wherein the color changing layers comprise a color filter, a fluorescent layer or combination thereof.

12. The organic EL display device of claim 11, wherein the color filter comprises a pigment and a particulate conductive material, and the fluorescent layer comprises a fluorescent pigment and a particulate conductive material.

13. The organic EL display device of claim 12, wherein the particulate conductive material comprises a conductive oxide.

14. The organic EL display device of claim 1, wherein the device further comprises switching elements between the color changing layers and the first electrodes, and certain part of the organic luminescent medium can emit light by selectively actuating the switching elements.

15. The organic EL display device of claim 1, wherein the device further comprises electrode plates opposed to the color changing layers and switching elements between the second electrodes and the electrode plates, and certain part of the organic luminescent medium can emit light by selectively actuating the switching elements.

16. A method of manufacturing an organic EL display device comprising;

forming conductive color changing layers and first electrodes, the color changing layers capable of being electrically connected to the first electrodes;

forming an organic luminescent medium above the color changing layers; and

forming second electrodes to sandwich the organic luminescent medium between the second electrodes and the color changing layers, a voltage being applied to the first and second electrodes.

17. The method of claim 16, further comprising forming a carrier transport flattening layer between the color changing layers and the organic luminescent medium.

18. The method of claim 16, wherein the first electrodes and the color changing layers are patterned by an etching method.

5 19. The method of claim 16, wherein the color changing layers are formed on the first electrodes by a micelle electrolytic method.

10 20. The method of claim 16, further comprising forming switching elements connected to the first electrodes or the second electrodes.